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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
10/642,341	08/18/2003	Kia Silverbrook	BIN07US	1923	
24011	7590 06/10/2004		EXAM	EXAMINER	
SILVERBROOK RESEARCH PTY LTD			DEUBLE, MARK A		
393 DARLING BALMAIN.	3 STREET 2041		ART UNIT	PAPER NUMBER	
AUSTRALÍA			3651		
			DATE MAILED: 06/10/2004	4	

Please find below and/or attached an Office communication concerning this application or proceeding.

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•	Application No.	Applicant(s)	v
	10/642,341	SILVERBROOK, KIA	
Office Action Summary	Examiner	Art Unit	
	Mark A. Deuble	3651	
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet wit	h the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPL THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a rep If NO period for reply is specified above, the maximum statutory period Failure to reply within the set or extended period for reply will, by statul Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply within the statutory minimum of thirth will apply and will expire SIX (6) MON te, cause the application to become AB.	ply be timely filed  (30) days will be considered timely.  IHS from the mailing date of this communication  ANDONED (35 U.S.C. § 133).	 1.
Status			
1) Responsive to communication(s) filed on			
·— · · · ·	 is action is non-final.		
Since this application is in condition for allows closed in accordance with the practice under	ance except for formal matte	·	<b>;</b>
Disposition of Claims			
<ul> <li>4) ⊠ Claim(s) 1-23 is/are pending in the application 4a) Of the above claim(s) is/are withdrays.</li> <li>5) □ Claim(s) is/are allowed.</li> <li>6) ⊠ Claim(s) 1-5 and 11-23 is/are rejected.</li> <li>7) ⊠ Claim(s) 6-10 is/are objected to.</li> <li>8) □ Claim(s) are subject to restriction and/</li> </ul>	awn from consideration.		
Application Papers			
9)☐ The specification is objected to by the Examir	ner.		
10) ☐ The drawing(s) filed on is/are: a) ☐ ac	cepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to the			
Replacement drawing sheet(s) including the corre			d).
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority document 2. Certified copies of the priority document 3. Copies of the certified copies of the priority application from the International Bure * See the attached detailed Office action for a list	nts have been received. nts have been received in A ority documents have been au (PCT Rule 17.2(a)).	pplication No. <u>09/721,859</u> . received in this National Stage	
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/06)  Paper No(s)/Mail Date	Paper No(s	Summary (PTO-413) s)/Mail Date nformal Patent Application (PTO-152) 	

#### **DETAILED ACTION**

### **Priority**

- Acknowledgment is made of applicant's claim for foreign priority under 35
   U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09/721,859, filed on November 25, 2000. *Drawings*
- 2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the means for generating an air cushion on either side of the page as it passes through the printing station of claim 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-3, 5, 11-18 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosasa et al. (U.S. Patent No. 5,735,659).

Kosasa et al. shows a method and system for printing, stacking and binding pages comprising a drive system 9,10,17, 20 that directs pages along a path 11, a print station 202 positioned downstream of the drive system that prints on the pages, an adhesive station 203

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positioned downstream of the print station that applies adhesive to the edges of each page, a support tray 41 that receives pages to be stacked, and a press device 51,52 adapted to apply a compressive force to the stack of pages adjacent an edge of the stack to bind the pages. The support tray is supported by a frame 42 and it includes an unillustrated side referential wall (col.4, ln.1) and sidewall 59 coupled to the support surface so that they extend perpendicularly to each other so as to define a corner that is lower than other portions of the support surface. The drive system directs pages into the support tray above the support surface thereby causing the pages to float into position on the support surface or the stack as the pages are blown downward by a fan 43 before being directed to bear against the sidewalls by means 49,50 to align the pages within the stack. Once aligned, the stack, is moved to the press device where an adhesive formed by tape 77 is applied to the edges of all of the sheets before being clamped onto the sheets by the pressing members 51,52 along the edge of the stack with adhesive thereon. Thus, Kosasa et al. shows all the structure required by claims 1-3, 11-13, and 15 and all the steps required by claims 20-23 except for the vibrator interacting with the tray of claim 1 or the vibrating step of claim 20. It should be noted, as it was in the prosecution of the parent application, that it is well known in the art that trays having one corner of their support surface positioned below the remainder of the support surface may advantageously be attached to ultrasonic vibrators to improve the alignment in a stack of sheets on the tray. This is evidenced by at least Johnson and Steurtz. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to attach an ultrasonic vibrator to the tray 41 of Kosasa et al. to vibrate the tray and thereby assist in alignment of the pages as they float down onto the tray. When Kosasa et al. is modified in this

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fashion it would show all the structure required by claims 1-3, 11-13, and 15 and operate with all the steps required by claims 20-23.

In regard to the dampers extending from the tray to the frame of claims 14 and 17, it should be noted, as it was in prosecution of the parent application, that the use of dampers for dampening excessive vibrations is well known in the art as is evidenced by Johnson and their use would have been obvious to one of ordinary skill in the art at the time of the invention.

Furthermore, in regards to the positioning of the dampers to extend from the tray to the frame to suspend the tray below the frame, the arrangement of the tray above or below the frame and the positioning of the dampers clearly falls within the realm of obvious design choice or obvious rearrangement of parts in the absence of some disclosure in the applicant's specification of some unusual advantage or result. *In re Kuhle*, 188 USPQ 7 (CCPA 1975).

Finally, in regard to the limitation of claim 16 that the tray is suspended from the frame, it is noted that the tray 41 is on top of the frame 42 rather than being suspended below the frame as required by the claim. However, placing the tray below the frame rather than on top of the frame makes no difference in the operation of the apparatus defined by the claims and therefore suspending the tray from the frame is also deemed to have been an obvious design choice as there is no evidence of any unusual advantage or result.

1. Claims 1-5, 11-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Godley (British document number 3 303 580.

Godley shows an apparatus for stacking and binding sheets fed to it from a drive system and print station arranged upstream. While not illustrated, such a print station would inherently have a drive system arranged to direct pages along a page path and a print head positioned on the

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page path downstream of at least a portion of the drive system for printing on the pages. Use of an ink jet print head for the printer would be an obvious design choice. After the pages are printed, they are fed along a conveyor 2 to a support tray that receives a stack of printed pages having binding adhesive applied adjacent an edge of the pages by an adhesive station formed by a contactless adhesive applicator 6. The tray includes a bottom support surface 24 and sidewalls formed by members 18 and 14 that extend substantially perpendicular to each other so that the perpendicular edges of the pages in the stack may be brought to bear against the sidewalls to be aligned. The tray is supported on a frame 26 that includes a frame means 22 to alter the level of the support surface of the tray 24 as each sheet is delivered so that the sheets are directed into the support tray above the support surface thereby causing the pages to float into position on the support surface or the stack. Thus, while Godley shows generally all that is required by the claim, the apparatus of Godley employs a jogging or knocking means 12 that presses the sheets into engagement with the sidewalls rather than a vibrator for aligning the sheets as required by the independent claims. It is well known in the art, however, that vibrating trays having one corner of their support surface positioned below the remainder of the support surface provide an advantageous means of aligning the sheets in a stack fed to the tray, as is evidenced by at least Johnson and Stuertz. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to downwardly angle the support tray of Godley and to provide a subsonic vibrator that interacts with the tray so that the sheets in the tray may be precisely aligned with one another against the perpendicular edges of the support tray. When the apparatus of Godley is modified in this fashion, it would have all the structure required by claims 1-5, 11-13, 15, and 18-19 and operate with all the steps required by claims 20-23 except for the

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pressing device/step of claims 1 and 20. However, as was noted in prosecution of the parent application, that the use of a press device for insuring that sheets are property adhered to each other is also well known in the art (as evidenced by at least Stuertz and Coyette). Therefore it would have been obvious to also provide a press device that applies a compressive force to the stack of pages adjacent the edge with the adhesive thereon. When this is done, Goodley would show all the structure required by claims 1-5, 11-13, 15, and 18-19 and operate with all the steps required by claims 20-23.

In regard to the dampers extending from the tray to the frame of claims 14 and 17, it should be noted, as it was in prosecution of the parent application, that the use of dampers for dampening excessive vibrations is well known in the art as is evidenced by Johnson and their use would have been obvious to one of ordinary skill in the art at the time of the invention.

Furthermore, in regards to the positioning of the dampers to extend from the tray to the frame to suspend the tray below the frame, the arrangement of the tray above or below the frame and the positioning of the dampers clearly falls within the realm of obvious design choice or obvious rearrangement of parts in the absence of some disclosure in the applicant's specification of some unusual advantage or result. *In re Kuhle*, 188 USPQ 7 (CCPA 1975).

Finally, in regard to the limitation of claim 16 that the tray is suspended from the frame, it is noted that the tray 41 is on top of the frame 42 rather than being suspended below the frame as required by the claim. However, placing the tray below the frame rather than on top of the frame makes no difference in the operation of the apparatus defined by the claims and therefore suspending the tray from the frame is also deemed to have been an obvious design choice as there is no evidence of any unusual advantage or result.

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## Allowable Subject Matter

2. Claims 6-10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Coyette, Crowley, Stuertz, and Johnson all show systems for stacking and binding pages that operate in fashions similar to that of the present invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark A. Deuble whose telephone number is (703) 305-9734.

The examiner can normally be reached on Monday through Friday except for alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher P Ellis can be reached on (703) 308-2560. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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